

Effect Of Yoga On Physical Fitness Components Of 300 Athlets

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Introduction:

In every society, there is an increasing concern about the maintenance of physical fitness and health of the youth as well as of adults. The current worldview, the materialistic approach sciences and technology and the associated life style will have to undergo changes towards a holistic worldview for health their and harmonious living. Apart from physical exercise emotion training and harnessing of the will power growth of the right side of the brain (institutional) are necessary. This is where the yoga helps. Yoga far from being mere physical or breathing exercise or demonstration of some mystical or other supernatural powers is a science of the future, with a holistic vision relevant to the progressive society. Toga is a conscious process of acceleration our growth from animal man to a normal man, to a great man to superman, a divine man and finally to divinity itself by gradually, manifesting immense personalities dormant in man.

Yoga not only works to bring fitness and vigor physical body, but also harnesses our will and emotions to improve our power of analysis, insight and vision, such a science to harness , the will, calm the mind and steady the emotions, still not losing the sharpness of the intellect is the key to human progress. The science of yoga is dedicated to helping people to change their personalities and life style.

Yoga has attracted particular attention in past because in appears to be me of the oldest continuous disciplines studying voluntary physical and mental control and the induction of altered status of consciousness.

Objectives Of The Study

The following are the major objectives of the study.

1. To study the effect of yoga on physical fitness components.
2. To study the effect of demographic variables on physical fitness component.

Hypotheses Of The Study:

The following are the hypotheses of the present study.

1. There is a significant effect of yoga on physical fitness components.
2. There is a significant influence of demographic variables on physical fitness components.

Review Of Related Literature

Angyan,l.,teczely,t.,z.,karsai,i.(2003) investigated the importance of the athletes motor capabilities in successes in sport. More precisely, the association of anthropometrical and physiological attributes, as well as motor abilities of elite basketball players. At the end of the competitive season, the anthropometrical and physiological feature were measured to establish the physical fitness of the subjects. Both general and sport specific motor tests were done. The coaches data sheet incorporated 14 parameters of the game. Regression analyses indicated significant correlation between certain variables of the laboratory tests and the data of the coaches estimation statics. Knowing these relationship provides us with valuable predictive information about players capabilities in sport.

Ibrahim and gwari (2011) . a study of achievement motivation of low amd high level volleyball players. The aim of the study was to examine the relationship of sports achievement motivation of volleyball players. A group of (n-50) male subjects divided into two groups (n+25high performers) and (n=25 low performance) were selected for this study from rural games mela held at Mendham tensile of Jammu and Kashmir stat. their age range of the subjects was 25 to 30. It was hypothesized that there may be significant differences with regard to achievement motivation among low and high performers. The 't' test was used to analyze data. The achievement motivation

scale by kamles (1990) was used to assess the differences among the low and high performers. The level of $p < .05$ was considered significant. Results indicated that significant relations were found between high/ low performers. On the basis of the results of the present empirical investigation it is concluded that significant relations were found between sport achievement motivation and low and high performance of volleyball players. These results may be corroborated with the findings of rathee and singh (2011) they observed that the differences between the two performance levels i.e., national and international have been found to be significant. These results provided evidence that high achievement motivation is an important factor that distinguishes high level performers (butt and cox,1992)

Sample Of The Study

The sample of the present study consists of 300 athletes selected from deferent institution. There will be 150 athletes who have learned yoga and 150 athletes who don't practice yoga . the sample finally will be subjected to physical fitness components namely speed, endurance, Flexibility, Agility , and Strength. The distribution of the sample based is given as under:

Sample	Male	Female	Total
Trained in Yoga	75	75	150
Non trained in Yoga	75	75	150
Total	150	150	300

Tools Used :

The following tools will be used in the study :

1) Personal Data Schedule:

This designed to collect the information's with regard to demographic factors of the sample of the study. These demographic variables include age, sex, family type and domicile. The information also includes the level of sports participation of the respondents

2) Physical Fitness test:

Sl no	Physical fitness test	Test	Unit of measurement
01	Speed	50 yard Dash	Time
02	Endurance	12min Run and Walk	Distance
03	Flexibility	Sit and Reach Test	Inches

04	Agility	Shuttle Run10*4 Yards	Time
05	Strength	Pull Ups	Score

Concept Of Fitness Components :

The following five motor tests which are helpful in assessing the fitness of an athlete's physical fitness

1.Speed:

Speed , like strength and endurance , is a conditional ability. It has a complex nature as it depends to a considerable extent on the central nervous system. Due to this fact the exact nature of see abilities is difficult to discover and understand. Moreover, because we can influence the functioning of the central nervous system only to a vary limited extent, speed performance cannot be improved to any considerable extent as is the case in strength and endurance besides because of the high role of the coordinative process in a speed performance of the improvements of speed has to be done with specific means and methods.

Speed ability should not be equated with mechanical speed which is equal to distance covered per unit of time. In several sports actions no distance is covered at all speed ability primarily signified the ability to execute motor movements with high speed these movements may be cyclic in nature. Schnabel (1981) gives the following definition of speed.

“it is the performance pre-requisite to do motor actions under given condition movement task, external factors, individual pre-requisites in minimum o time” speed performance appears in deferent form in various sports. We can divide speed abilities in to five types : reaction ability movement speed, acceleration ability loco motor ability and speed endurance.

2. Endurance:

Endurance like strength, is a conditional ability. It is primarily determined by energy liberation process. The ability of human body to maintain a certain level of energy production forms the psychological basis of endurance. Due to high importance for health for training for competition And also due to its psychological determinants, which can be relatively easily studied, it is ability, which has been studied in great detail and depth by the psychologists.

Endurance is directly or indirectly of great importance in all sports. It is however, not easy to define endurance. Nabatnikova (1976) brings this in to focus by representing definitions given by several experts. Disagreement among experts is much more regarding the definition of different types of endurance e.g. :- Special Endurance, Speed Endurance, strength Endurance, etc.,...

But there is agreement regarding the certain aspects of endurance like; it relates to doing work for a long time of period; it relates to working under fatigue conditions; it involves a large number of muscles and involves work efficiency.

Harre (1986) defines endurance as the ability to resist to fatigue. Schnabel (1981) also defines endurance as the resistance ability to fatigue. Martine (1979) and Mathew (1981) have also used the concept of 'ability to resist fatigue' for defining endurance. But Hardayal Singh (1991) writes "endurance is ability to do sports movement, with desired quality and speed, under the conditions of fatigue."

Without an understanding of fatigue caused by training and competition load and the psychophysiological system involved in countering the effects of fatigue one cannot fully grasp the nature of endurance. Because of the overwhelming contribution made by sports psychology the psychic aspect of endurance is often overlooked. But it is important to realize that endurance is much a product of psychic functions as of physiological functions. This fact has been proved time and again by successful endurance athletes.

3. Flexibility

Flexibility is a motor ability, which is not merely a conditional or a coordinative ability it depends on the energy liberation process and partly on the coordinative process of the CNS (Menial and Schnabel 1987). In common usage flexibility means much more than what is conveyed by any of these terms. Flexibility can be defined as the ability to execute movements with greater amplitude or range.

Stretch ability and elasticity are the qualities of the muscles and ligaments by which these can be stretched and can regain their normal length without any adverse effect on the concerned tissue. Suppleness denotes the ability of a muscle to remain

in the state of low tension thereby allowing for smooth and easy movements of the limbs.

Mobility pertains to the degree of movement possible in a different place at joint. Stretch ability, elasticity, mobility, and suppleness, therefore are a part parcel of flexibility as these represent different capacities, which enable the person to execute movements with greater amplitude.

Flexibility is measured by determining the range of movement possible at joint this has given rise to the notion that flexibility is joint specific but in actual sports movements the range of the movements is the product of range of movements possible at more than one joint, for the greater amplitude. Therefore some degree of coordination of different joints movement is necessary pre-requisite in all sports movements. However, in a maximum range of movements all joints are not required is less than the maximum possible. But a higher level of flexibility enables an athlete to achieve the required movement amplitude easily without much muscle tension etc...

4. Agility :

Agility may be defined as the physical ability, which enables an individual to rapidly change body position and directions in a precise manner. But since one decade and a half term agility has been gradually replaced by the term coordinative abilities (Martin, 1979) Mathew (1981) Hare (1986) Menial and Schnabel (1981)

5. Strength:

Strength is a conditional ability, i.e., it depends largely on the energy liberation process in the muscles. Strength is also perhaps the most important motor ability in sports as it is a direct product of muscle contractions. All movements in sports are caused by muscle contractions and therefore, strength is a part of the parcel of all motor abilities, technical skills and tactical actions. Strength is and strength training has, therefore high importance in achieving good performance in all sports. The role of strength training for general health, good posture and for prevention of injuries is usually overlooked which is the long run can prove harmful. Zammermann (1889) has very rightly pointed out the position effect of strength training on the muscle, bones, joints, heart, circulatory system, metabolism and nervous system.

Strength is ability to overcome resistance or a act against resistance . Strength should not be considered a product of only muscular contractions, it is, fact, a product of voluntary muscle contractions caused by the neuromuscular system.

Analysis And Interpretation Of Results

Analysis and interpretation of data based on the spastically result and findings. Further the results are discussed as per the following steps.

- Analysis of yogic effect on physical fitness component of athletes
- Analysis of yogic effect on speed , agility, flexibility, endurance and strength of athletes

Canclusion And Reccomndation

- 1) There Is A Significance Difference of yogic effect on physical fitness of athletes.
- 2) There Is A Significance Difference of yogic effect on speed , agility, flexibility, endurance and strength of athletes

Recommendations:

Based On The Findings And Results Of Present Study The Following Recommendations Were Drawn.

1. It Is Recommended That Based On The Study Results Coaches And Trainers Can Prepare Scientific Training Programmers For athletes .
2. The Study Helps To Prepare The Profile Of Physical Fitness on athletes performance.

References

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